In the Claims

1.   (currently amended) A video imaging system, comprising:

a camera head for transmitting image data;

a camera control unit for receiving and processing said image data from said camera head, said camera control unit including at least one programmable hardware device;

a storage device accessible by said camera control unit;

a software program stored on said storage device;

said software program executing on said camera control unit for enabling said camera control unit to process said image data;

said software program configuring said programmable hardware device; and

said programmable hardware device executing said software program to enable said camera control unit to process said image data from said camera head.

2.   (cancelled)

3.   (cancelled)

4.   (cancelled)

5.   (cancelled)

6.   (currently amended) The video imaging system according to claim 1, wherein said ~~camera control unit comprises:~~ at least one reconfigurable hardware device, ~~from the group consisting of~~ is selected from the group consisting of: field programmable gate arrays, and computer programmable logic devices; and at least one programmable hardware device, from the group consisting of digital signal processors, and microprocessors.

7.   (cancelled)

8.   (original) The video imaging system according to claim 1, wherein said storage device is located within said camera head.

9.   (original) The video imaging system according to claim 1, wherein said storage device is located within said camera control unit.

10.   (original) The video imaging system according to claim 1, wherein said storage device includes a removable, replaceable memory unit.

11.   (original) The video imaging system according to claim 1, wherein said storage device is remotely accessible.

12.   (original) The video imaging system according to claim 11, wherein said storage device is an Intranet location.

13.   (original) The video imaging system according to claim 11, wherein said storage device is an Internet location.

14.   (original) The video imaging system according to claim 1, wherein said program enables said camera control unit to issue commands to said camera head.

15.   (previously presented) The video imaging system according to claim 14, wherein said camera head sends confirmation to said camera control unit that said commands were received.

16.   (original) The video imaging system according to claim 14, wherein said camera head adjusts operating characteristics in response to said camera control unit commands.

17.   (currently amended) A video imaging system, comprising:

a camera for transmitting image data;

a camera control unit for receiving and processing the image data from said camera;

a storage device <u>remotely located from and</u> accessible by said camera control unit;

software executing on said camera control unit for receiving a <u>software</u> program stored on said storage device; and

said <u>software</u> program executing on said camera control unit for modifying hardware of said camera control unit for receiving the image data.

18.   (previously presented) The system according to claim 1, further comprising software executing on said camera control unit for determining when said camera head is in communication with said camera control unit.

19.   (previously presented) The system according to claim 1, further comprising software executing on said camera control unit for downloading said program when said camera head is in communication with said camera control unit.

20.   (previously presented) The system according to claim 1, wherein the storage device is a remote location.

21.   (original) The system according to claim 20, wherein said remote location is an Internet location.

22.   (currently amended) A video imaging system, comprising:

a camera for transmitting image data;

a camera control unit for receiving and processing the image data from said

camera;

a storage device accessible by said camera control unit;

a software program stored on said storage device;

software executing on said camera control unit for determining when said

camera is in communication with said camera control unit;

said software program executing on said camera control unit for configuring

~~hardware~~ a configurable portion of said camera control unit; and

said software program executing on said camera control unit for enabling said

camera control unit to process the image data.

23.   (original) The video imaging system according to claim 22, wherein the

configurable portion further comprises a field programmable gate array.

24.   (original) The video imaging system according to claim 23, wherein said

program configures said field programmable gate array of said camera control unit to

enable it to process image data from said camera.

25.   (original) The video imaging system according to claim 22, wherein said

program enables said camera control unit to issue commands to said camera and

camera sends confirmation to said camera control unit that said commands were

received.

26.   (original) The video imaging system according to claim 22, further including a

second storage device and processed image data is stored on said second storage

device.

27.   (currently amended) A video imaging system, comprising:

a camera control unit for receiving and processing image data;

a <u>software</u> program located on a storage device for enabling said camera control unit to process the image data;

a configurable hardware device located on said camera control unit for processing the image data;

a processor located on said camera control unit for retrieving and executing said <u>software</u> program <u>to configure said configurable hardware device</u>; and

said <u>software</u> program executing on said ~~processor for enabling said~~ configurable hardware device and enabling said camera control unit to process the image data.

28.   (original) The video imaging system according to claim 27, further comprising a pre-existing program located on said configurable hardware device for processing the image data.

29.   (original) The video imaging system according to claim 28, wherein said program executing on said processor overwrites said pre-existing program.

30.   (original) The video imaging system according to claim 27, wherein said configurable hardware device further comprises a non-overwritable portion for requesting said program.

31.   (original) The video imaging system according to claim 30, wherein said non-overwritable portion loads said program.

32.   (currently amended) A method for video imaging, comprising the steps of:

providing a camera for transmitting image data;

providing a camera control unit for processing the transmitted image data;

determining when the camera is in communication with the camera control unit;

retrieving a <u>software</u> program from a storage device for enabling the camera control unit to be compatible with the camera;

executing the <u>software</u> program on the camera control unit; ~~and~~

~~modifying~~ <u>configuring</u> a ~~hardware~~ <u>programmable</u> device of the camera control unit to enable the camera control unit to process image data transmitted from the camera<u>; and</u>

<u>executing the software program on the configured programmable device to process image data</u>.

33.   (new) A video imaging system, comprising:

a camera for transmitting image data;

a configurable hardware device for receiving and processing the image data from said camera;

a storage device remotely located from and accessible by said configurable hardware device;

software executing on said configurable hardware device for receiving a software program stored on said storage device; and

said software program executing on said configurable hardware device for modifying hardware of said configurable hardware device for receiving the image data.

34.   (new) A video imaging system, comprising:

a camera for transmitting image data;

a configurable hardware device for receiving and processing the image data from said camera;

said configurable hardware device including a configurable portion and a non-configurable portion;

a software program executing on the non-configurable portion of said configurable hardware device;

a storage device having configuration data stored thereon and accessible by said configurable hardware device;

said non-configurable portion of said configurable hardware device receiving the configuration data; and

said software program modifying said configurable portion of said configurable hardware device based upon the configuration data for receiving the image data.